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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,043	03/10/2004	Mark R. Smith	INP003-US	2737

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EXAMINER

GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/796,043	Applicant(s) SMITH ET AL.	
	Examiner Jean A Gelin	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-4, 8-15, 19-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Bennett (US 2002/0112014).

Regarding claims 1, 12, Bennett teaches a method of exchanging a short message service (SMS) message between networks operating in accordance with different standards (section 0005), comprising: establishing an intermediary system (corresponding to router 24 and routing database 22 collectively) that operates between a first network operating in accordance with a first standard and a second network operating in accordance with a second standard (sections 0020-0021, 0062); receiving, at the intermediary, a routing information request for an SMS message from the first network (i.e., the function of the message broker, sections 0024, 0189); sending, from the intermediary in response to the routing information request, an acknowledgement message to the first network (sections 0035, 0037-0046); receiving the SMS message at the intermediary (sections 0037-0038); generating, in the intermediary, an acknowledgement of receipt of the SMS message, and sending the acknowledgement of receipt to the first network (section 0046); and sending the SMS message from the

intermediary to the second network, wherein the intermediary is an entity distinct from the first and second networks (section 0062).

Regarding claims 2, 13, Bennett teaches wherein the first network operates in accordance with GSM standards (section 0026).

Regarding claims 3, 14, Bennett teaches wherein the second network operates in accordance with ANSI standards (i.e., facilitating communication between all combination of connection types and format, section 0062).

Regarding claims 4, 15, Bennett teaches wherein the intermediary system emulates a mobile switching center operating in accordance with GSM standards (i.e., server functioning as a broker takes decision or to route the message, sections 0061-0063).

Regarding claims 8, 19, Bennett teaches wherein the step of sending the acknowledgement of receipt to the first network is performed only after a response from the second network is received at the intermediary system (section 0046).

Regarding claims 9, 20, Bennett teaches wherein the step of sending the acknowledgement of receipt to the first network is performed only after an acknowledgement of receipt of the SMS message is received from the second network at the intermediary system (section 0046).

Regarding claims 10, 21, Bennett teaches wherein the intermediary operates (i.e., server 24 operates as broker, a translator, or a reformatter), from the perspective of the first network, as a Mobile Switching Center (MSC) (see fig. 1), in accordance with the same standards as the standards of the first network (section 0062).

Regarding claims 11, 22, Bennett teaches wherein the intermediary operates (i.e., server 24 operates as broker, a translator, or a reformatter), from the perspective of the second network, as a Mobile Switching Center (MSC) (see fig. 1), in accordance with the same standards as the standards of the second network (section 0062).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Tuomi (US 2004/0093418).

Regarding claims 5, 16, Bennett teaches all the limitations above except wherein the routing information request is a MAP Send Routing Information for MT SMS message in accordance with GSM standards.

However, the preceding limitation is known in the art of communications. Tuomi teaches the server emulates SMS-GMSC by sending a routing information request to the database (HLR); the service needed to implement this in the GSM environment is the MAP Send Routing Information For Short Message (section 0041). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Tuomi within the system of Bennett in order to determine the MSC serving the mobile station.

Regarding claim 23, Bennett teaches a system for exchanging a short message service (SMS) message between networks operating in accordance with different standards (section 0005), comprising: an intermediary network system (server 24) connected simultaneously to a first network (18) operating in accordance with a first standard and a second network (26b or 26c, first and second networks are different) operating in accordance with a second standard (sections 0056-0062), the intermediary (server 24) comprising an intermediary gateway providing an SS7 interface with the database (sections 0021-0024) on one side thereof and an IP interface with the wireless PDA (section 0027) on another side thereof, the intermediary gateway being in communication with a home location register (HLR), mobile switching center/visitor location register (MSC/VLR) and short message service center (SMSC) of the second network; the intermediary gateway comprising an intermediary Location Register, an intermediary Transmitting Station, and an intermediary Receiving Station (sections 0034-0047).

Bennett fails to teach each of which substantially emulate, respectively, HLR functionality, GSM SMSC functionality and MSC functionality.

However, the preceding limitation is known in the art of communications. Tuomi teaches the server emulates SMS-GMSC by sending a routing information request to the database (HLR); the service needed to implement this in the GSM environment is the MAP Send Routing Information For Short Message (section 0041). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention,

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to implement the technique of Tuomi within the system of Bennett in order to determine the MSC serving the mobile station.

5. Claims 6, 7, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Allison et al. (US 2003/0083078).

Regarding claims 6, 17, Bennett teaches all the limitations above except performing a GTT look up to determine to which switch the SMS message should be sent.

However, the preceding limitation is known in the art of communications. Allison teaches GTT associated with message discriminator is a translation process used to determine the location, and the GTT is required to route the message to SMSC (sections 0076-0079). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Allison within the system of Bennett in order to perform a look up in the database of message discriminator, and determine whether the SMS message is an unwanted message.

Regarding claims 7, 18, Bennett in view of Allison teaches all the limitations above. Bennett further teaches wherein when the SMS message is directed to a mobile station (MS) operating in the second network, the SMS message is routed to the intermediary system (i.e., transmitting message from one station in one network to another station in another network via the broker server, section 0062).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Knots

US 6,658,260 B2

12/02/2003

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEAN GELIN
PRIMARY EXAMINER

JGelin

October 30, 2004

